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Assessment of the 2011 national reform programme and stability programme for ESTONIA

Accompanying the document

Recommendation for a

COUNCIL RECOMMENDATION

on the National Reform Programme 2011 of Estonia and delivering a Council Opinion on the stability programme of Estonia, 2011-2014

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1. INTRODUCTION

After the severe credit-related boom and bust of recent years, the Estonian economy started recovering in 2010. Combined with an improved global environment, more cautious banking policies, sizeable labour market adjustments and higher competitiveness helped the economy to swiftly rebalance towards tradable sectors. However, the country still needs to implement reforms to prevent imbalances from recurring, while strengthening growth drivers. To this end, the National Reform Programme (NRP) presents an ambitious reform agenda, while the Stability Programme (SP) confirms the long standing commitment to sound fiscal policies. These documents also reflect the short term commitments that the Estonian Government approved on 28 April May 2011 under the Euro Plus Pact (EPP) with the objective to improve Estonia's competitiveness and contribute to a higher degree of convergence in the euro area.

2. RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

During the last ten years Estonia achieved significant convergence with the EU, supported by a currency board regime, a sound fiscal policy and low public debt. However, fiscal discipline alone was insufficient to guarantee macro-economic stability, as financial convergence, extremely low real interest rates, rapidly rising disposable income and unrealistic wage expectations fuelled domestic credit growth. This led to a real estate and consumption boom from 2005 and to domestic overheating and substantial external imbalances. Similarly to other countries experiencing a boom-bust cycle, Estonia was particularly hard-hit by the global financial crisis, with spiking unemployment and a cumulative gross domestic product (GDP) loss in 2008-09 amounting to 19%.

The Estonian economy started recovering in 2010, with real GDP growth at 3.1% driven by exports and a strong inventory rebound, while domestic demand remained subdued. The country is benefiting from the rapid and robust recovery of its main trading partners (Sweden, Finland, Russia, Germany), and the revival of world trade.

Reflecting the economy's catching-up potential, real GDP is expected to continue growing above the EU average over the long-term thanks to continuing capital accumulation and productivity gains. In the short term, growth is projected at 4.9% in 2011 and 4.0% in 2012; this growth will be driven by exports and, increasingly, by domestic demand as well, mostly through strong investment.

The current account turned into a large surplus in 2009, reducing the stock of external liabilities. In 2010, the net foreign assets negative position fell by 10 pp (from 84.5% of GDP in 2009). The ratio of both gross and net external debt to GDP improved similarly, with short term liabilities fully covered by short term assets.

Harmonised Index of Consumer Prices (HICP) annual average inflation was around zero during the downturn, but sharply increased to 2.7% in 2010, with monthly inflation reaching 5.4% year-on-year in December. However, prices were largely driven by the increase in global commodity prices. Looking forward, global commodity prices are expected to bring inflation up to 4.7% in 2011, but should contribute to inflation moderation in 2012. Nevertheless, there is a risk that current inflationary developments may affect expectations, adding to an upward pressure on wages due to possible skills mismatches.

At 244% of GDP in 2009 (non-consolidated figures), the high stock of private debt still reflects past domestic imbalances and the persisting financial vulnerability of private actors. However, some credit deleveraging (even though it is slowing down) is taking place, while

increasing domestic deposits and prudent supervisory policies help to ensure that the stability of the banking sector is maintained.

The export-led recovery could allow the country to deleverage smoothly over a reasonable time period. However, large external liabilities might require a further reallocation of activity and improvements in competitiveness to foster exports, while further reducing domestic imbalances appears necessary to consolidate macro-economic and financial stability.

Overall, the level of potential growth in Estonia in the coming years is likely to stay below its pre-crisis rate, when rapid capital accumulation reflected EU accession and swift financial convergence. Moreover, the population is ageing, and the working age population is declining. Post-crisis structural unemployment will also continue at a high level, weighing on the potential for growth if high unemployment becomes structural. However, steady foreign direct investment inflows would still bring about a sizeable contribution of total factor productivity to growth, while continuing structural reform could boost potential growth. In parallel, a number of factors are likely to support a strong contribution of capital to potential growth, such as the existence of a business and policy climate that favours private investment, public infrastructure investment supported by EU structural funds, and the need for further improvements to the housing stock when real wage growth resumes. There is a risk that these factors could lead to the re-emergence of pro-cyclical imbalances once domestic demand has recovered.

3. MONITORING, PROCEDURAL ISSUES AND GOVERNANCE

Estonia submitted the strategic documents under the EU reporting requirements of the European Semester on 29 April. Both the NRP and the SP are fully consistent with Estonia's Mid-Term Budgetary Strategy and with the Government's Action Programme 2011-2015. All four documents were adopted by the Government as a package on 28 April. The EU Affairs Committee of the Riigikogu gave its support to both the NRP and SP on 29 April 2011.

Estonia also reported on its reform intentions in the framework of the EPP, and these were endorsed by the Government together with other strategic documents.

All strategic documents are mutually consistent and based on the common macroeconomic scenario. The NRP presents the main policy measures designed to improve Estonia's competitiveness, defines policy objectives for 2015 and 2020, and makes commitments to reforms to be implemented before June 2012 in the framework of the EPP. The SP is the first report of this kind presented by Estonia after joining the euro area on 1 January 2011.

Estonia already set its headline targets in 2010 but has strengthened the 76% employment target in 2011 by setting national targets for youth and long-term unemployment. Ambitious but achievable targets have been set for poverty and social exclusion as well as for life-long learning, aiming to bring Estonia to a comparable level with the Nordic countries.

Table 1 — Estonian Europe 2020 targets

Europe 2020 targets	Current situation in Estonia[1]	Estonian Europe 2020 target in the NRP
R&D investment (% of GDP)	1.42%	3%
Employment rate (%)	66.4%	76%
Early school leaving (%)	13.9%	9.5%
Tertiary education attainment (%)	35.9%	40%
Reduction of number of people in or at risk of poverty or exclusion	58 000	Reduce the at-risk-of poverty rate (after social transfers) to 15% (from 17.5% in 2010)
Energy efficiency – reduction of energy consumption in Mtoe[2]		Reduction in energy consumption: 0.71 Mtoe[3]
Reduction of greenhouse gas emissions (from sources not covered by the Emission Trading System)	+4%[4]	+11%[5]
Renewable energy (% of total energy use)	19% (2008)	25%

4. POLICY CHALLENGES AND ASSESSMENT OF POLICY AGENDA

4.1 CHALLENGES

First, with regard to public finances, a key challenge is to strengthen the role of fiscal policy as a tool for maintaining macroeconomic stability. During the crisis, considerable fiscal consolidation was needed to restore a structural position which had deteriorated in boom years, despite nominal surpluses. Since consolidation was to some extent achieved through increases in labour taxation, one-offs and temporary measures, further adjustments may be needed. The longer-term commitment to sound fiscal policies has not yet been fully institutionalised in the existing fiscal framework. Additionally, while the early implementation of pension reform has mitigated the risk to fiscal sustainability, current low replacement ratios may prove difficult to maintain in the long run. Given the need to maintain a prudent fiscal stance, efficiency gains should be sought in implementing structural reforms.

Second, although the banking sector weathered the economic and financial crisis relatively well, private sector indebtedness is still high, the financial sector has not fully recovered, and external liabilities are rather large. In the present context of high inflation, wage pressures could reappear and feed into excessive credit growth. Such a risk is magnified by fiscal provisions that encourage borrowing, including underdeveloped property taxation.

Third, competitiveness issues remain a source of concern in the future, both in terms of sustainability of export growth and in view of keeping internal imbalances under control. Better functioning markets could ensure that domestic price pressures are contained, while keeping wage growth in line with productivity could help ensure cost competitiveness, supporting exports and helping to avoid second-round effects.

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1 Eurostat 2009 figures unless stated

2 As estimated by the Commission. Mtoe = Million tonnes of oil equivalent

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4 This quantity corresponds to the 2005-2008 evolution of the emissions not covered by the EU Emissions Trading System (ETS). As the scope of the ETS evolved between 2005 and 2008, these emissions are estimated on the basis of the main relevant UNFCCC source categories (as opposed to the difference between total emissions and EU ETS verified emissions).

5 The national emissions limitation target defined in Decision 2009/406/EC (or 'Effort Sharing Decision') concerns the emissions not covered by the EU ETS. It is expressed as the minimum relative decrease (if negative) or the maximum relative increase (if positive) compared to 2005 levels.

Fourth, the sharp increase in unemployment during the crisis is now reversing, but long-term unemployment is still high and not yet declining. Structural unemployment could thus weigh on labour supply and lead to premature upward pressures on wages in growing sectors. At the same time, labour-related bottlenecks are already reappearing in some subsectors, suggesting that efforts to ensure an adequate skilled labour supply and to underpin sustainable growth are still insufficient.

Fifth, the relatively low infrastructure investment stock, both domestic and cross-border, restrains goods and factors mobility. Estonia is a country where unemployment rates across regions have been rather divergent and persistent. In parallel, Estonia's resource intensity is one of the highest in the EU, while the importance of oil shale as an energy source emphasises the need to develop more efficient and less polluting energy sources.

Box 1. — ***Euro Plus Pact (EPP) — Commitments and actions taken by the Estonian authorities***

To meet the three objectives of the EPP, the following reforms will be carried out by the Estonian Government by June 2012:

a. to foster competitiveness

*(i) Civil service benefits reform and increased transparency of the wage system***;**

(ii) Implementation of the higher education reform;

(iii) Launch of a start-up programme for innovative enterprises;

b. to foster employment

(iv) Adoption of the law to reduce the personal income tax rate from 21% to 20% (from 2015);

(v) Abolishment of the fringe benefits tax on work related studies;

c. to contribute further to the sustainability of public finances

(vi) Lowering the annual upper limit for income tax exemptions to EUR 1920;

(vii) First phase of the reform of special pension schemes;

(viii) Achievement of a budget balance in 2013 and a budget surplus in 2014;

(ix) Inclusion of a public sector budget balance requirement in the state budget base law.

Commitments made by the Estonian authorities under the EPP appear both ambitious and realistic, and, if implemented, can contribute to improving competitiveness and ensuring more balanced growth. While most measures can be put in place before June 2012, many of them can only be expected to deliver results in the medium term. All of the measures are included in the NRP.

Finally, as economic diversification and the transition to higher value-added output is taking place, skills shortages are becoming apparent, and could affect investment and growth potential in the medium term. In this light, a better-functioning education system, including in engineering, could be instrumental in ensuring an adequate supply of human capital and could lead to important efficiency gains in the public sector.

4.2 ASSESSMENT OF THE POLICY AGENDA

4.2.1 Macroeconomic policies

4.2.1.1 Public finances

The stability programme's baseline macroeconomic scenario envisages that, following a recovery in 2010-11, the economy will continue growing at a sustainable rate of around

3.75% on average in 2012-2015. While the recovery was initially driven by external demand, domestic demand is set to play an increasingly prominent role, while the contribution of net exports will be slightly negative. Overall, the projections in the programme's baseline scenario are comparable to those in the Commission services' Spring 2011 forecast, although the latter foresees a speedier recovery both in the real economy and in the labour market during 2011, while the outlook for 2012 is broadly similar. Consumer price projections are similar in both forecasts, while the programme scenario assumes a rapid acceleration in particular in investment prices, resulting overall in a higher domestic price projection in 2011 and, correspondingly, an even higher nominal GDP growth expectation in that year than in the Commission services' forecast.

Cyclical conditions are set to improve fast both in the programme scenario and in the Commission services' projections. The output gap as recalculated by the Commission services based on the information in the programme, following the commonly agreed methodology, is expected to close in 2014[6], which is in line with the Commission services' projections. It should be nevertheless noted that the calculation of potential growth has to be interpreted with caution, given fast structural changes in the Estonian economy due both to the catching-up process and the ongoing post-crisis rebalancing of the economy towards a more sustainable growth pattern. Overall, the programme's macroeconomic assumptions appear to be plausible.

The general government budget position was a surplus of 0.1% of GDP in 2010. Maintaining the general government deficit within the limits of the Stability and Growth Pact and reaching a surplus position, a challenging task given the extent of the downturn, was made possible by a remarkable consolidation implemented in particular in 2009 and to a lesser extent in the 2010 budget law. The outcome in 2010 was considerably better than the deficit of 2.2% of GDP projected in the January 2010 update of the convergence programme. This was primarily a result of a significantly faster-than-expected economic recovery and also of a better 2009 outturn. In addition, the outcome was positively affected by sizeable sales of so-called 'Kyoto units'[7], which amounted to 1.0% of GDP in 2010. As regards levels of revenue and expenditure in relation to GDP, these were considerably lower than expected in the January 2010 update of the convergence programme, for example, general government expenditure was 40.0% of GDP in 2010 against the expectation of 47.9% in the previous programme. This is partly due to the denominator effect, but the bulk of the difference is attributable to a lower-than-expected absorption of EU structural funds.

The January 2010 update of the convergence programme targeted a deficit of 2.0% of GDP in 2011. The outcome is now expected to be better than previously envisaged both in the Commission services' spring forecast, which expects a deficit of 0.6% GDP in 2011, and in the April 2011 stability programme, which aims at a deficit of 0.4% of GDP in that year. These better projections reflect, similarly to 2010, a more buoyant economic recovery, as well as continued sales of Kyoto units, even though the positive impact of those sales is partly offset in 2011 by investment expenditure obligations under the sales contracts of 2010-2011. Without the impact of revenue and expenditure related to the Kyoto units, the deficit would have been higher by some 0.4pp of GDP. The differences in fiscal projections for 2011

[6] Compared to the recalculated information, the programme itself projects a more belated closure of the output gap. The discrepancy is mainly attributable to some methodological differences in treating exceptional changes on the labour market over recent years.

[7] An Assigned Amount Unit (AAU) is a tradable 'Kyoto unit' or 'carbon credit' representing an allowance to emit greenhouse gases. AAUs are issued up to the level specified in Annex 1 Party to the Kyoto Protocol. Estonia received a higher quota amount than needed given the current structure of the economy and is able to sell the surplus of the CO2 quota allocated for the 2008-12 commitment period.

between the Commission services' Spring 2011 forecast and the SP amount to 0.2pp in terms of the general government balance.

The main goal of the programme is to reach the medium-term objective (MTO), which is a structural balance, by 2013 and to maintain it throughout the rest of the programme period. The MTO more than adequately reflects the objectives of the Stability and Growth Pact. Moreover, the programme targets structural surpluses, as recalculated by the Commission services on the basis of the information in the programme, in the outer years of the programme from 2013, thus aiming at exceeding the MTO[8]. To achieve this goal, the programme targets nominal surpluses from 2013, reaching a headline surplus of 1.0% of GDP in 2015. Other fiscal objectives of the programme include rebuilding the government's financial assets from 2015 and reducing the tax burden to its pre-crisis level through lowering labour taxes.

Public finances are set to deteriorate in 2012, with a deficit target of 2.1% of GDP in the programme for that year. This deterioration primarily relates to two factors. Firstly, several consolidation measures of a temporary nature, which were implemented against the exceptional economic downturn and recorded as one-offs in the SP and the Commission services' Spring 2011 forecast, are gradually expiring. This in particular relates to the resumption of contributions by the state to the mandatory funded pension fund, which were suspended in 2009-2010, resumed partly in 2011 and will go back to their pre-crisis level from 2012[9]. Similarly, high dividends from state-owned enterprises in 2009-2011 are being gradually lowered. The second major factor relates to sales of Kyoto units described above: if in 2010-2011 these affected public finances positively as the sales contracts were signed, in 2012 the effect is markedly negative (at -1.2% of GDP) due to the implementation of the investment obligations in the sales contracts.

The authorities intend to hold back growth in government consumption expenditure, which is set to increase at a slower rate than nominal GDP over the whole programme period. Within government expenditure, education expenditure is set to play a more prominent role. Although the proposals in the NRP with regard to education may have a budgetary impact, this is offset by planned efficiency gains in several areas, notably education and active labour market policies. Another prominent area of the NRP relates to increased infrastructure and environment related investments, in particular in 2011 and 2012, although this expenditure is largely financed either with the help of EU structural funds or from the proceeds of the sales of Kyoto units. Government investments are set to decline sharply from 2013 onwards due to the fading impact of both sources of financing. Other measures to achieve the budgetary position envisaged in the programme are expected to be spelled out in details in forthcoming budgets.

In the outer years of the programme, the targeted improvement in the nominal budgetary position relates to lower growth in general government expenditure, compared to revenue. While revenue is set to decline by 5.8pp of GDP between 2010 and 2015 as a result of phasing out EU structural funds, a reversal of temporary consolidation measures and several planned cuts in labour taxes in 2013-2015 (see box 2), the share of expenditure is projected to decline by 6.7pp over the same period. While this strategy is subject to risks, both related to macroeconomic developments and the implementation of the strategy, these risks can be

[8] The programme itself projects higher structural surpluses than is suggested by the recalculated information in all years, with the average difference of 0.5pp in 2011-2013 and reaching the MTO already in 2011. These discrepancies primarily relate to differences in the output gap estimate (see footnote 1).

[9] Compensatory measures that aim at an accelerated build-up in assets of the mandatory funded pension scheme are foreseen for 2014-2017 and will have a negative impact on the headline balance in the outer years of the programme.

assessed as broadly balanced, in particular given the solid track record of the Estonian authorities in meeting the previously set targets. When assessed against the projected rate of medium term potential output growth and taking into account discretionary revenue measures (notably financing increased investment expenditure in 2011-2012 on account of EU funds and proceeds from the sales of Kyoto units), expenditure projections over the programme period seem to point to an appropriate adjustment path towards the MTO.

Box 2. — *Main measures*

This box provides an overview of discretionary measures with a significant budgetary impact or impact on potential growth provided in the stability programme and the National Reform Programme.

Main budgetary measures

Revenue	Expenditure
2011	
• Increase in tobacco excise by 10% (0.06% of GDP)	n.a.
2012	
• Abolishing reduced excise rates for special purpose diesel; net effect (0.2% of GDP) • Increase in tobacco excise by 10% (0.05% of GDP)	• Reform of special pension schemes (impact not specified) • Increase in the number of state financed study places for higher education institutions as part of higher education reform (impact not specified)
2013	
• Lowering unemployment insurance contributions (details and impact not specified) • Lowering the upper limit of personal income tax benefit (impact not specified) • Increase in tobacco excise by 10%	n.a.
2014	
• Introducing cap on social security contributions for high earners (impact not specified)	n.a.
2015	
• Lowering personal income tax rate from 21% to 20% (impact not specified)	n.a.

In addition, the recent Coalition agreement also includes a proposal to abolish from 2013 the land tax on residential land up to 1500 m2 in densely populated areas and up to 2 ha in rural areas.

The following main measures with an impact on potential growth are reported in the NRP:

– *measures to support capital deepening* include large-scale infrastructure investment co-financed by EU structural funds and TEN-T projects, and projects to improve energy efficiency and to increase a share of renewable energy financed by the sale of Kyoto units;
– *measures to support labour utilisation* are aimed at strengthening the effectiveness of active labour market policies, increasing lifelong learning opportunities, and supporting female employment;
– *measures that can contribute to higher productivity* include a reform of the education system, support to innovative enterprises and start-ups, incentives for investment in R&D and innovation, and improving framework conditions for FDI.

The debt-to-GDP ratio, which is the lowest in the EU, is projected to further decline over the programme period, reaching 5.4% of GDP in 2015. It is assumed in both the Commission services' spring 2011 forecast and in the stability programme that all of the 2011 general

government deficit and part of the 2012 deficit will be financed by running down previously accumulated financial assets, rather than new borrowing. The available gross liquid assets of the general government (currency and deposits, debt securities and quoted shares) amounted to 12.3% of GDP at the end of 2010, according to Statistics Estonia. From 2013 the government intends to start rebuilding its financial assets, which stood at 16.3% in 2006.

The strength of the fiscal governance framework of Estonia lies in the long-standing commitment to the budget balance rule, although the rule itself is not formalised in legislation. The SP contains plans to submit to Parliament in the course of 2011 draft amendments to the organic budget law, which would among other things formalise the budget balance requirement taking into account the minimum requirements for the national budgetary framework.

Estonia is at low risk with regard to the long-term sustainability of public finances. The long-term cost of ageing is close to zero and the current budgetary position accounts for the bulk of the sustainability gap. However, calculations related to the long-term cost of ageing are based on the assumption of maintaining the current policy of low pensions, which constitute a risk factor. Based on the current fiscal position, debt would increase to 36.6% of GDP by 2020 (see Figure in the statistical annex). However, the full implementation of the programme would be sufficient to put the debt on a downward path by 2020. Given the low debt in Estonia, full implementation of the programme would further limit the already low risks to the sustainability of public finances.

The Government aims to further address the sustainability and adequacy of the pension system by modifying access to special pensions and pensions under favourable conditions. Current legislation also stipulates that the Government will make a decision by 2019 on whether to link the retirement age to life expectancy. Finally, the increasing number of persons on invalidity pensions is likely to lead to further reforms being considered to bring disabled people back to work. On current trends, the adequacy of minimum pensions and access to long-term care may become problematic in the future.

4.2.1.2 Financial sector

Promoting savings as a means to support the ongoing deleveraging of private actors and prevent recurring imbalances on the housing and mortgage markets appear desirable, and the tax system can have effects in this respect. The recent alignment of the taxation regime for financial profits earned by private persons with the one granted to legal persons is a step in the right direction. In the NRP, the envisaged lowering of the annual ceiling for the income tax exemption includes the tax deductibility of mortgage interest payments[10] and is partly aimed at reducing the fiscal incentives to borrow, thereby limiting the risk of recurring real estate-related overheating. The Estonian authorities also consider abolishing the land tax on small and medium-sized plots of residential land from 2013, which could have a limited, but opposite, effect. In parallel, a planned revaluation of theoretical land prices used as a basis for the existing land tax could make the planned quasi-abolition of the land tax revenue-neutral for local governments. The NRP also reports on intentions to provide incentives for voluntary health insurance and to reform the special pensions scheme, which could encourage savings.

Overall, efforts made by the Estonian authorities to limit risks of recurring real estate-related overheating in the future are commendable. However, incentives to borrow will continue to

[10] The government has recently proposed to Parliament to reduce the ceiling for the total tax exemption from €3196 to €1920. The effect (positive for public finances) will materialise in 2013, when 2012 tax declarations are settled.

exist (e.g. partial deductibility of mortgage interest payments and loan guarantees[11]), while the real estate taxation instrument will be weakened. Should the land tax reform appear desirable for non-economic reasons, reducing the land tax rate rather than its base would keep the instrument fit for possible interventions when needed. Preparations could already be initiated to ensure that in the medium-term the fiscal impact of a possible reduction in the land tax rate is compensated by an expansion of the land tax base to include the value of buildings.

Households' limited financial literacy and the reduced access for enterprises to alternative forms of financing will remain sources of concern. However, measures to foster access of innovative SMEs to risk capital are considered in the NRP. In parallel, it might become important to further reinforce the management framework dealing with bank insolvency to bring it in line with the forthcoming solutions at EU level, and to strengthen the 2010 Nordic Baltic Memorandum of Understanding for cross-border crisis cooperation, which is not binding.

4.2.1.3 Other macroeconomic issues

Box 3. — *Food and energy prices*

	Annual food inflation rate (Feb 2011)	Annual energy inflation rate (Feb. 2011)	Energy intensity (2008)	Energy dependency, in% (2008)	Weight of food in HICP-basket (in%) in 2011	Weight of energy in HICP-basket (in%) in 2011
Estonia	12.7%	8.6%	570.5	23.8%	31.2%	13.9%
European Union	3.2%	11.8% (estimated)	167.1	54.8%	20.1%	10.6%

At 12.7% in February 2011, the annual food inflation rate in Estonia was the highest in the EU. Fruit and vegetables, as well as milk, cheese and eggs, saw the highest increases over the past year. Multiple causes explain the high responsiveness of domestic food prices, including the fact that in a small economy enterprises in that sector enjoy a high market power in an environment of accelerated regional convergence of prices[12] and reduced domestic supply due to larger exports to Russia in the 2010 summer.

In spite of the economy's high energy intensity — partly the result of a production structure concentrated in energy-intensive sectors and industries — the overall energy inflation rate in Estonia is below EU average. Among the main components, liquid fuels, gas, and solid fuels show the highest increases. The low energy dependency in Estonia, explained by the extensive use of domestic oil shale as a source of primary energy, eases the impact of oil price hikes on electricity prices. Excise duties on transport fuels also affect energy prices and inflation rates. Although still low compared with most Member States, excise duties are increased on a regular basis and are passed through to food prices through transport and production costs.

Also, the impact of food and energy inflation on headline HICP inflation depends directly on the share of food and energy in the consumption basket. Different levels of income as well as differences in consumption patterns mean that the rise in commodity prices will influence inflation differently. At 31%, Estonia has one of the highest shares of food (including alcohol and tobacco) in household spending among Member States. The surge in food prices thus affects Estonian consumers more negatively than their counterparts in most Member States.

At around 14%, the share of energy in total household spending in Estonia is also above the EU average. Overall, food products (including alcohol and tobacco) were responsible for 2.4 pp of annual inflation in January 2011. For its part, energy inflation accounted for 0.6 pp and so, together, energy and food products accounted for more than half of Estonia's 5.1% inflation rate (y-o-y).

Improving market functioning could be important in countering inflation expectations and in reducing the risk of competitiveness losses, especially given the small size of Estonia's

[11] Housing loan guarantees provided by the Credit and Export Guarantee Fund.

[12] Food prices in the region, i.e. in Russia, Finland, and Sweden, are among the highest in the world.

product markets. The recent reform of the Competition Authority provides a good basis for action in this area, and consideration could be given to an implementation of recent Competition Authority proposals to make markets work better, including with respect to possible market failures (e.g. in transportation, energy, professional services and banking) and possible oligopolistic behaviour (e.g. in the food sector). Public procurement will remain an important concern, especially given the large public investment considered and the amount of EU funds being used. In particular, the participation of SMEs could be further increased, and tendering accelerated and made more transparent. Attention could also be paid to enforcement of EU Law, as transposition and enforcement have recently deteriorated.

The authorities have also announced their intention of swiftly completing the reform of the Civil Service Law and the public wage system. This measure could contribute to limiting the public wage bill and ensure that public wage growth remains in line with productivity growth in the whole economy, thereby reducing inflationary pressures.

4.2.2. Labour market policies

In the NRP, the Estonian authorities intend to address structural unemployment, in order to avoid a resulting declining labour supply becoming an obstacle to sustainable growth. In particular, they are considering measures to reinforce active labour market policies (ALMPs), such as enlarging the access to intermediation and career guidance systems, establishing a skills forecasting system and promoting professional qualification.

Tackling unemployment

Addressing one of the lowest ALMP expenditures in the EU and low ALMP coverage, the NRP reports on intentions to raise the effectiveness of ALMPs and ensure the sustainability of its financing, notably through inter-linking labour market services and social benefits. Nevertheless, the financial gains from the planned changes have not been assessed, while increases in unemployment benefits and cuts in social contributions are already considered.

Tackling high youth and regional unemployment can be important to improve overall labour supply. The NRP introduces an ambitious national target for youth unemployment[13]. However, additional specific measures could be considered for bringing not only unemployed youth, but also inactive young people to the labour market, as existing labour market measures from which the young can already benefit under favourable conditions are insufficient for solving the increasing youth and long-term unemployment.

Flexicurity

While Estonia has already implemented reforms to ensure the institutional flexibility of the labour market, the 'security' side measures of the Labour Law package have been postponed until 2013. A higher degree of security, i.e. a reasonable increase in unemployment benefit levels within the agreed 'Labour Law package', would be consistent with usual 'flexicurity' packages and could be desirable from a macro-stability perspective. While strengthening social security, efficiency gains could be obtained through means testing and better targeting, including of disability benefits, where the OECD data points to possible problems.

Making work pay

Reducing the tax wedge on labour can be instrumental in stimulating labour demand and supply. In Estonia, the tax wedge, especially on low income earners, is higher than the OECD average. The NRP commits to a programmed reduction in the total tax wedge on labour,

[13] At 10 % in 2020 (32.9 % in 2010), with an interim target at 15 % in 2015.

mostly through a reduction of the personal income tax from 21% to 20% from 2015, lower contributions to the unemployment insurance fund from 2013 (details to be decided), and introduction of a cap on social contributions for high wages from 2014. These measures go in the right direction, although, given the planned timing, they would not have a macroeconomic effect in the assessment horizon.

Poverty and Social Exclusion

Even though the at-risk-of-poverty rate in Estonia is already around the EU average, the Estonian authorities intend to further reduce this risk, mostly by increasing the education and skills levels and thereby employability. A challenging target rate at 15% by 2020 has been set. Addressing labour market and education challenges can support the planned reduction in poverty and social exclusion. However, little attention is paid to the development of support services for increasing the access of risk groups to education as the at-risk-of-poverty rate was four times higher for people with basic or lower education.

The NRP commitments can contribute to preventing structural unemployment from expanding and to facilitating the restructuring of the economy. In particular, a challenge is to ensure the effective and efficient implementation of ALMPs at lower levels of government, targeting the young and the long-term unemployed as well as the regions with very high unemployment. The reduction in the tax wedge on labour and a better targeting of benefits could also contribute to poverty reduction. Finally, attention devoted to labour mobility across sectors could specifically target the job potential of newly developing sectors.

Education and training

Notwithstanding the very good performance of Estonia in PISA, and the overall high share of people with tertiary education, there are significant skills gaps and an excessive number of schools and tertiary education institutions, and a rather unfocussed professional education. A comprehensive education reform could also improve public sector efficiency, as currently the system appears too fragmented at the local level, leading to inefficient subsidies and low-quality services.

The Government has set quite an ambitious target for lifelong learning (LLL)[14]. Though the possibilities for training and re-training will be extended, there is a wide participation gap between those already well qualified and those in need of additional training. It may, therefore, be advisable to further target the most disadvantaged social groups, increase the attractiveness of LLL, and raise awareness of its importance, and involve employers.

In parallel, the Government intends to address the problem of the high rate of early school leaving (ESL) for boys and the high number of young people with a low education level. The set target for ESL (9.5% in 2020) would be achieved through a careful implementation of the recent Schools Act, extended career counselling, and the development of key competencies, creativity and entrepreneurship.

However, the response to the ESL problem remains fragmented and insufficient. The transition from school to the labour market could be smoothed by establishing a system for learning assistance that would start as early as pre-school level. However, the Government continues to delegate most activities to local authorities, which have been unable to cope with existing tasks.[15] Increasing the efficiency of local authorities appears therefore as a key challenge. More generally, far-reaching reforms to prevent dropping-out, mainly

[14] From 10.9% in 2010 to 20% in 2015.

[15] e.g. money for hiring assistant teachers, and the creation of regional counselling centres.

concentrating on disadvantaged groups and early intervention may be necessary., and the possibilities of re-entering mainstream education could be increased.

4.2.3. Growth enhancing structural measuresBusiness climate

With respect to infrastructure, a number of projects promote factor and goods mobility across the country and strengthen connections between Estonia, the Baltic region and the rest of the EU.[16] Special attention is also devoted to moving Estonia to the frontline of the 'digital society', notably through a strengthening of high-speed access to the internet. In the transport sector, it appears desirable to watch closely a possible deterioration of energy-intensity indicators in freight transport and the declining investment and maintenance costs of rail infrastructure.

Climate change and energy efficiency

In spite of the influence of the economic crisis, the recent trend in greenhouse gas emissions does not appear in line with the 2020 national target defined at the European level (+11% compared to 2005 levels), suggesting that additional emissions reduction measures and/or the use of flexibility mechanisms could be beneficial, alongside a close monitoring of the road transportation and agriculture sectors given their weight in national emissions and the current trend.

Beyond the current focus on final energy savings, a strengthening of cost-effective policy measures encouraging the use of primary energy resources in the production and distribution of power and centralised heat could be considered. In this respect, the use of waste heat from industry and thermal power production is of particular interest. Thermal refurbishment of housing could also be encouraged, in a broader context including major sectors and areas with energy savings potential. Addressing the high level of greenhouse gas emissions of current energy sources may require additional infrastructure projects, in particular to accommodate the increasing amount of wind energy. In implementing the National Renewable Energy Action Plan, further attention could be paid to renewable energy use in transport, where serious efforts appear necessary. Estonia intends to open its energy market, improve competition, and invest in new infrastructure. Finally, reinforced regional energy interconnections could actively contribute to achieving Estonia's objective to diversify its energy supply.

Estonia's energy intensity is amongst the highest in the EU. This is partly the result of a production structure concentrated on energy-intensive sectors and industries. Another determinant is the low energy efficiency performance of certain sectors. However, this energy intensity has decreased by almost 50% since 1995, in particular within industry, partly as a result of a number of structural changes. Energy efficiency in the residential sector has also improved, but at a slower pace. On the other hand, energy intensity indicators for freight transport have slightly deteriorated. In the energy sector, the dominance of oil-shale, with its low-caloric value, emphasises the need to develop other more efficient energy sources.

Research and innovation

Cooperation between academia and the business sector can still be further enhanced. Various existing measures, such as competence centres, innovation vouchers and business clusters exist, but due to a lack of systematic policy evaluation, their effectiveness is unclear and it appears that Competence Centres could be further integrated into 'clusters' and linked to

[16] In this respect, the EU Strategy for the Baltic States establishes a framework and a series of coordinated actions addressing the international dimension of the important strategic challenges and opportunities facing the Member States within the wider region.

similar centres in the Baltic region. In parallel, the Estonian Research, Development and Innovation Strategy 2007-2013 outlines 3 key areas (ICT, biotechnologies, and materials sciences), but these are broad and might therefore not provide sufficient focus for reaching a critical mass in certain domains. This highlights that the definition of sectoral priorities is only gradually appearing in Estonia. This is especially challenging for a small economy with limited financial and human resources and a high dependency on external trade, and underlines the need to efficiently adapt to the European and global research and development system. Finally, tertiary education better aimed at fields of key importance to the Estonian economy (e.g. engineering) can be instrumental in fostering the ongoing rebalancing of the economy towards tradable sectors.

Overall, the NRP commitments largely respond to the challenges the country currently faces with regard to supporting young innovative enterprises and attracting foreign R&D intensive investments and highly skilled human resources. However, cooperation between academia and the business sector can be further enhanced. In parallel, while a reform of the education system is ongoing, focusing on the quality and availability of pre-school facilities and professional education as well as on engineering can be highly beneficial. In the energy sector, given the size of the challenges, initiating additional infrastructure projects for producing renewable energy and further reducing the general resource intensity, including in buildings and transport, through a concrete action plan and initiatives appear desirable. Finally, strengthening the Baltic political determination to support and coordinate the development of cross-border capacities and connections could bring tangible results.

5. SUMMARY

The sizeable fiscal consolidation implemented in particular in 2009 helped to maintain the general government budget within the Treaty limits. The April 2011 SP targets aim at achieving headline and structural surpluses from 2013, although in the short term the fiscal outlook is expected to deteriorate somewhat due to the one-off impact of environmental investment obligations related to sales of 'Kyoto carbon credits'. The programme provides some information regarding measures to reach the targeted position and the previous track record of meeting the fiscal targets mitigates the risk of missing them in the coming years. Estonia appears to be at low risk with regard to the long-term sustainability of public finances, although current calculations do not fully reflect risks related to the adequacy of future pensions.

While the current performance of the Estonian economy does not point to major policy shortfalls and reforms implemented in the last decade have strengthened growth potential, the crisis has highlighted the importance of developing more sustainable growth models. To this end, the NRP outlines many ambitious structural reform initiatives. However, there appears to be some lack of prioritisation in the document and concrete measures to address challenges are not always clearly identified. In parallel, the effective implementation of active labour market policies and strong incentives to work appear instrumental in raising labour utilisation. Moreover, further productive and cost effective infrastructure investment as well as lowering the resource intensity of the economy would help deliver sustainable growth. Education reform, focusing notably on fields of major importance to the Estonian economy, appears to be the key to enhance human capital and increase productivity. Given the need to maintain a prudent fiscal stance, efficiency gains in implementing structural reforms remain of primary importance.

STATISTICAL ANNEX

Table I. Macroeconomic indicators

	1995-1999	2000-2004	2005-2008	2009	2010	2011	2012
Core indicators							
GDP growth rate	5.7	8.0	5.5	-13.9	3.1	4.9	4.0
Output gap [1]	-8.0	3.3	8.3	-11.1	-7.7	-3.2	-0.3
HICP (annual % change)	10.2	3.5	6.5	0.2	2.7	4.7	2.8
Domestic demand (annual % change) [2]	6.1	9.3	6.1	-23.4	1.4	4.9	4.5
Unemployment rate (% of labour force) [3]	10.0	11.2	6.0	13.8	16.9	13.0	11.5
Gross fixed capital formation (% of GDP)	27.3	28.8	32.8	21.6	18.6	20.5	21.8
Gross national saving (% of GDP)	21.0	22.3	22.3	24.5	25.9	26.4	25.9
General Government (% of GDP)							
Net lending (+) or net borrowing (-)	**-0.2**	**0.7**	**0.9**	**-1.7**	**0.1**	**-0.6**	**-2.4**
Gross debt	**6.8**	**5.3**	**4.3**	**7.2**	**6.6**	**6.1**	**6.9**
Net financial assets	**34.3**	**29.7**	**29.9**	**29.4**	**n.a**	**n.a**	**n.a**
Total revenue	39.2	35.8	36.3	43.4	40.1	39.2	38.0
Total expenditure	39.5	35.1	35.4	45.1	40.0	39.8	40.4
of which: Interest	0.4	0.2	0.2	0.3	0.2	0.2	0.3
Corporations (% of GDP)							
Net lending (+) or net borrowing (-)	**-7.6**	**-5.6**	**-5.1**	**5.4**	**7.9**	**7.3**	**7.8**
Net financial assets; non-financial corporations	**-105.2**	**-122.9**	**-166.2**	**-184.0**	**n.a**	**n.a**	**n.a**
Net financial assets; financial corporations	**-7.7**	**-16.5**	**-3.8**	**7.4**	**n.a**	**n.a**	**n.a**
Gross capital formation	20.7	22.5	23.0	8.9	12.2	12.6	13.6
Gross operating surplus	23.4	30.6	30.6	23.5	30.0	28.8	28.8
Households and NPISH (% of GDP)							
Net lending (+) or net borrowing (-)	**0.5**	**-3.3**	**-7.7**	**5.5**	**1.6**	**1.6**	**-0.2**
Net financial assets	**51.2**	**49.2**	**61.8**	**67.2**	**n.a**	**n.a**	**n.a**
Gross wages and salaries	37.5	34.2	36.7	39.4	35.7	36.1	35.8
Net property income	1.0	2.3	1.6	0.3	-0.3	-0.6	-1.4
Current transfers received	18.2	15.6	13.1	18.2	17.0	16.3	15.8
Gross saving	3.9	0.2	-1.2	8.0	4.0	4.1	2.8
Rest of the world (% of GDP)							
Net lending (+) or net borrowing (-)	**-7.9**	**-8.2**	**-11.7**	**7.8**	**6.6**	**5.4**	**2.4**
Net financial assets	**27.5**	**60.5**	**78.3**	**80.6**	**n.a**	**n.a**	**n.a**
Net exports of goods and services	-8.9	-5.6	-7.9	6.1	6.7	6.4	5.8
Net primary income from the rest of the world	-0.9	-4.3	-5.3	-2.3	-4.5	-5.4	-6.5
Net capital transactions	0.5	0.5	1.2	3.3	3.7	3.6	2.3
Tradable sector	49.4	48.9	44.7	41.0	45.0	n.a	n.a
Non tradable sector	39.1	40.2	43.5	45.4	42.6	n.a	n.a
of which: Building and construction sector	5.5	5.1	7.5	6.0	5.0	n.a	n.a
Real effective exchange rate (index, 2000=100)	97.1	105.8	135.4	158.8	144.1	148.2	148.5
Terms of trade goods and services (index, 2000=100)	95.8	104.6	111.5	111.8	110.1	109.3	109.1
Market performance of exports (index, 2000=100)	84.8	98.4	104.8	99.3	110.7	119.9	120.5

Notes:

[1] The output gap constitutes the gap between the actual and potential gross domestic product at 2000 market prices.

[2] The indicator on domestic demand includes stocks.

[3] Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-74.

Source :

Commission services' spring 2011 forecast

Table II. Comparison of macroeconomic developments and forecasts

	2010		2011		2012		2013	2014	2015
	COM	SP	COM	SP	COM	SP	SP	SP	SP
Real GDP (% change)	3.1	3.1	4.9	4.0	4.0	4.0	3.6	3.6	3.4
Private consumption (% change)	-1.9	-1.9	3.2	2.2	3.5	4.5	4.4	4.6	4.6
Gross fixed capital formation (% change)	-9.2	-9.1	14.9	7.9	10.6	8.2	7.7	7.1	6.6
Exports of goods and services (% change)	21.7	21.7	16.0	15.9	6.4	5.5	7.1	6.8	6.8
Imports of goods and services (% change)	21.0	21.0	16.9	16.3	7.1	6.0	8.0	7.9	8.0
Contributions to real GDP growth:									
- Final domestic demand	-3.0	-3.5	4.4	2.6	4.1	4.0	4.0	4.3	4.4
- Change in inventories	4.3	4.4	0.0	0.5	0.0	-0.1	-0.1	-0.3	-0.3
- Net exports	1.7	1.6	0.4	0.9	-0.1	0.0	-0.3	-0.5	-0.7
Output gap[1]	-7.7	-7.5	-3.2	-3.9	-0.3	-1.5	-0.1	0.8	1.2
Employment (% change)	-4.8	-4.2	4.2	2.2	1.3	1.9	1.1	0.9	0.8
Unemployment rate (%)	16.9	16.9	13.0	13.5	11.5	11.4	10.0	8.8	8.0
Labour productivity (% change)	8.3	7.6	0.6	1.8	2.7	2.1	2.5	2.6	2.6
HICP inflation (%)	2.7	2.7	4.7	4.5	2.8	2.8	3.0	2.8	2.7
GDP deflator (% change)	1.5	1.5	2.4	3.8	2.2	3.0	3.1	2.8	2.7
Comp. of employees (per head, % change)	-0.2	-1.0	4.4	5.0	4.0	4.5	5.2	5.2	5.4
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	6.6	6.8	5.4	6.4	2.4	4.8	2.2	0.0	-1.8

Note:

[1]In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.

Source :

Commission services' spring 2011 forecasts (COM); Stability programme (SP).

Table III. Composition of the budgetary adjustment

(% of GDP)	2010	2011		2012		2013	2014	2015	Change: 2010-2015
	COM	COM	SP	COM	SP	SP	SP	SP	SP
Revenue	**40.1**	**39.2**	**39.9**	**38.0**	**38.3**	**36.8**	**35.3**	**34.3**	**-5.8**
of which:									
- Taxes on production and imports	13.5	13.6	13.7	13.8	13.9	13.6	13.6	13.5	0.0
- Current taxes on income, wealth, etc.	6.7	6.6	6.7	6.5	6.5	6.5	6.5	6.2	-0.5
- Social contributions	13.1	12.8	12.3	12.2	11.7	11.5	11.1	11.1	-2.0
- Other (residual)	6.7	6.2	7.2	5.6	6.2	5.2	4.1	3.5	-3.2
Expenditure	**40.0**	**39.8**	**40.3**	**40.4**	**40.4**	**36.8**	**34.8**	**33.3**	**-6.7**
of which:									
- Primary expenditure	39.8	39.6	40.1	40.1	40.2	36.5	34.5	33.0	-6.8
of which:									
Compensation of employees and intermediate consumption	19.2	18.3	18.2	17.8	17.5	16.9	16.3	15.9	-3.3
Social payments	14.7	14.1	14.6	13.8	13.9	13.7	13.5	13.3	-1.4
Subsidies	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Gross fixed capital formation	3.6	5.0	5.1	5.3	5.7	3.3	2.1	2.1	-1.5
Other (residual)	1.3	1.1	1.3	2.2	2.0	1.6	1.7	0.8	-0.5
- Interest expenditure	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.1
General government balance (GGB)	**0.1**	**-0.6**	**-0.4**	**-2.4**	**-2.1**	**0.1**	**0.5**	**1.0**	**0.9**
Primary balance	**0.3**	**-0.4**	**-0.2**	**-2.1**	**-1.8**	**0.3**	**0.7**	**1.2**	**0.9**
One-off and other temporary measures	2.9	1.3	1.1	-1.2	-1.2	0.0	-0.3	-0.3	-3.2
GGB excl. one-offs	**-2.7**	**-1.9**	**-1.5**	**-1.2**	**-0.9**	**0.1**	**0.8**	**1.3**	**4.0**
Output gap[2]	-7.7	-3.2	-3.9	-0.3	-1.5	-0.1	0.8	1.2	8.9
Cyclically-adjusted balance[2]	2.5	0.3	0.8	-2.3	-1.7	0.1	0.2	0.6	-1.8
Structural balance[3]	**-0.4**	**-0.9**	**-0.3**	**-1.1**	**-0.5**	**0.1**	**0.5**	**0.9**	**1.3**
Change in structural balance		*-0.5*	*0.1*	*-0.1*	*-0.1*	*0.6*	*0.4*	*0.4*	
Structural primary balance[3]	-0.3	-0.7	-0.1	-0.8	-0.3	0.4	0.8	1.2	1.5
Change in structural primary balance		*-0.5*	*0.1*	*-0.1*	*-0.1*	*0.7*	*0.4*	*0.4*	

Notes*:*

[1]On a no-policy-change basis.

[2]Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the information in the programme.

[3]Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.

Source :

Stability programme (SP); Commission services' spring 2011 forecasts (COM); Commission services' calculations

Table IV. Debt dynamics

(% of GDP)	average 2005-09	2010	2011		2012		2013	2014	2015
			COM	SP	COM	SP	SP	SP	SP
Gross debt ratio[1]	**4.9**	**6.6**	**6.1**	**6.0**	**6.9**	**6.0**	**5.8**	**5.6**	**5.4**
Change in the ratio	0.4	-0.6	-0.5	-0.6	0.8	0.0	-0.2	-0.2	-0.2
Contributions[2] *:*									
1. Primary balance	**-0.6**	**-0.3**	**0.4**	**0.2**	**2.1**	**1.8**	**-0.3**	**-0.7**	**-1.2**
2. "Snow-ball" effect	**-0.1**	**-0.2**	**-0.2**	**-0.3**	**-0.1**	**-0.1**	**-0.2**	**-0.1**	**-0.1**
Of which:									
Interest expenditure	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2
Growth effect	0.0	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Inflation effect	-0.2	-0.1	-0.1	-0.2	-0.1	-0.2	-0.2	-0.1	-0.1
3. Stock-flow adjustment	**1.1**	**-0.2**	**-0.6**	**-0.5**	**-1.2**	**-1.7**	**0.3**	**0.6**	**1.1**
Of which:									
Cash/accruals diff.	0.1	-0.3							
Acc. financial assets	1.0	0.2							
Privatisation	0.0	0.0							
Val. effect & residual	0.0	0.0							

Notes:

[1]End of period.

[2]The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

Source :

Stability programme (SP); Commission services' spring 2011 forecasts (COM); Commission services' calculations.

Table V. Long-term sustainability

Estonia	Baseline scenario (2010)			Programme scenario		
	S1		S2	S1		S2
Value	0.2		1.1	-1.7		-0.6
of which:						
Initial budgetary position (IBP)	0.7		1.0	-1.0		-0.7
Debt requirement in 2060 (DR)	-0.6		-	-0.8		-
Long-term change in the primary balance (LTC)	0.1		0.1	0.1		0.1
	2010	2015	2020	2010	2015	2020
Debt as % of GDP	6.6	20.3	36.6	6.6	5.4	-0.8

Figure. Medium term debt projection

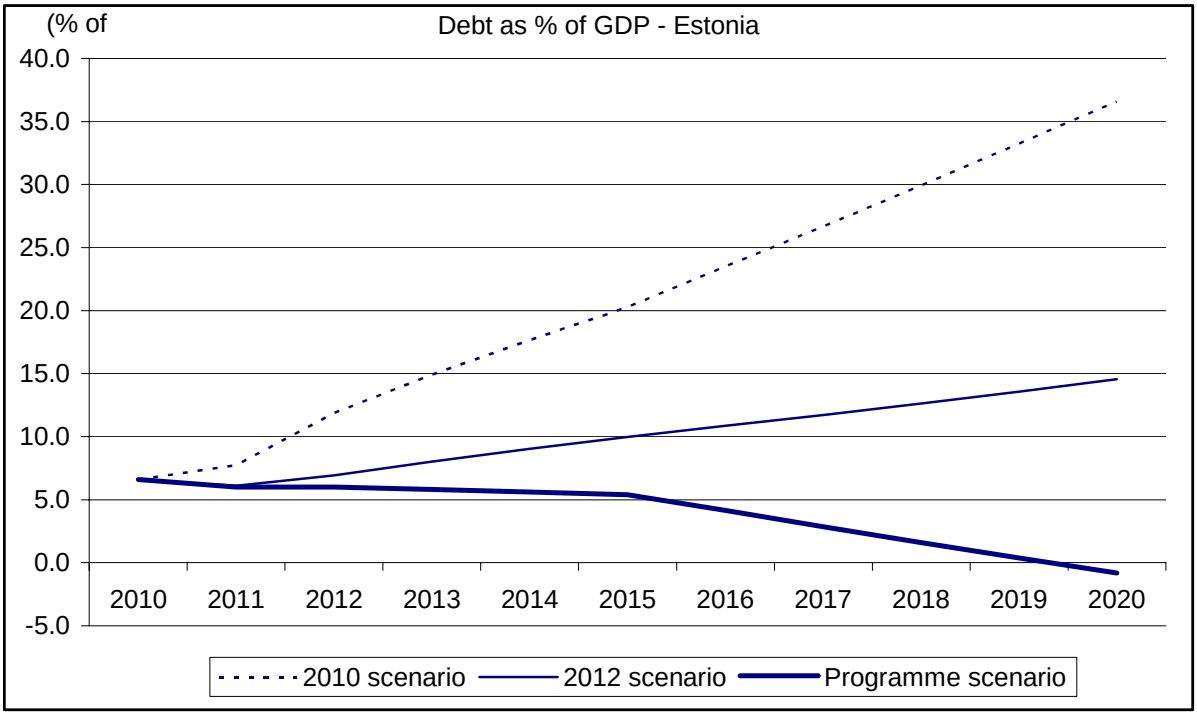

Table VI. Financial market indicators

	2006	2007	2008	2009	2010
Total assets of the banking sector (% of GDP)	…	…	134.0	154.8	143.9
Share of assets of the five largest banks (% of total assets)	97.1	95.7	94.8	93.4	…
Foreign ownership of banking system (% of total assets)	98.5	98.3	97.1	94.9	…
Financial soundness indicators:					
- non-performing loans (% of total loans)	0.2	0.4	1.9	5.2	5.4
- capital adequacy ratio (%) [1)]	13.2	14.8	18.8	22.2	22.1
- profitability - return on equity (%) [2)]	19.2	30.2	13.4	-24.6	2.1
Private credit growth (annual % change)	…	…	…	-1.3	-5.5
Residential property prices (y-o-y % change)	48.3	14.3	-13.4	-35.9	0.1
Exposure to countries receiving/repaying official financial assistance (% of GDP) [3)]	…	…	…	…	…
Private debt (% of GDP)	2.1	…	102.3	112.7	102.2
Gross external debt (% of GDP)					
- Public	2.3	1.4	3.3	5.9	6.2
- Private	45.3	45.4	51.2	49.7	51.3
Long term interest rates spread versus Bund (basis points)*	124.9	187.7	418.0	476.1	322.5
Credit default swap spreads for sovereign securities (5-year)*	…	…	524.8	373.9	107.2

Notes:

[1)] The capital adequacy ratio is defined as total capital devided by risk weigthed assets.

[2)] Net income to equity ratio. Branches of foreign banks are excluded.

[3)] Covered countries are IE, EL, PT, RO, LV and HU.

* Measured in basis points.

Source:

Bank for International Settlements and Eurostat (exposure to macro-financially vulnerable countries), IMF (financial soundness indicators), Commission services (long-term interest rates), World Bank (gross external debt) and ECB (all other indicators).

Table VII. Labour market and social indicators

Labour market indicators	2005	2006	2007	2008	2009	2010
Employment rate (% of population aged 20 - 64)	72,0	75,8	76,8	77,0	69,9	66,7
Employment growth (% change from previous year)	2,0	5,4	0,7	0,2	-10,0	-4,8
Employment rate of women (% of female population aged 20 - 64)	69,0	72,5	72,5	72,8	68,8	65,7
Employment rate of men (% of male population aged 20 - 64)	75,4	79,5	81,4	81,7	71,0	67,7
Employment rate of older workers (% of population aged 55 - 64)	56,1	58,5	60,0	62,4	60,4	53,8
Part-time employment (% of total employment)	7,8	7,8	8,2	7,2	10,5	11,0
Fixed term employment (% of employees with a fixed term contract)	2,7	2,7	2,1	2,4	2,5	3,7
Unemployment rate[1] (% of labour force)	7,9	5,9	4,7	5,5	13,8	16,9
Long-term unemployment[2] (% of labour force)	4,2	2,9	2,3	1,7	3,8	7,7
Youth unemployment rate (% of youth labour force aged 15-24)	15,9	12,0	10,0	12,0	27,5	32,9
Youth NEET[3] rate (% of population aged 15-24)	10,2	8,8	8,9	8,8	14,9	:
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	13,4	13,5	14,4	14,0	13,9	:
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	30,6	32,5	33,3	34,1	35,9	:
Labour productivity per person employed (annual % change)	7,3	4,9	6,1	-5,2	-4,4	8,3
Hours worked per person employed (annual % change)	0,7	-0,5	-0,1	-1,5	-7,0	2,6
Labour productivity per hour worked (annual % change; constant prices)	6,5	5,4	6,2	-3,8	2,7	5,6
Compensation per employee (annual % change; constant prices)	5,0	5,3	12,7	2,7	-3,3	-1,7
Nominal unit labour cost growth (annual % change)	3,3	8,7	17,4	16,2	1,2	-7,9
Real unit labour cost growth (annual % change)	-2,1	0,4	6,2	8,4	1,2	-9,2

Notes:

[1] According to ILO definition, age group 15-74)

[2] Share of persons in the labour force who have been unemployed for at least 12 months.

[3] NEET are persons that are neither in employment nor in any education or training.

Sources:

Comission services (EU Labour Force Survey and European National Accounts)

Table VII. Labour market and social indicators (continued)

Expenditure on social protection benefits (% of GDP)	2004	2005	2006	2007	2008
Sickness/Health care	4,03	3,95	3,74	4,06	4,82
Invalidity	1,17	1,16	1,14	1,13	1,47
Old age and survivors	5,59	5,44	5,41	5,32	6,40
Family/Children	1,63	1,50	1,45	1,40	1,79
Unemployment	0,20	0,16	0,11	0,14	0,31
Housing and Social exclusion n.e.c.	0,19	0,15	0,12	0,10	0,10
Total	12,8	12,4	12,0	12,1	14,9
of which: Means tested benefits	0,17	0,13	0,10	0,07	0,06
Social inclusion indicators	**2005**	**2006**	**2007**	**2008**	**2009**
Risk-of-poverty or exclusion[1] (% of total population)	25,9	22,0	22,0	21,8	23,4
Risk-of-poverty or exclusion of children (% of people aged 0-17)	28,4	24,1	20,1	19,4	24,5
Risk-of-poverty or exclusion of elderly (% of people aged 65+)	29,2	27,8	35,4	40,9	35,6
At-Risk-of-Poverty rate[2] (% of total population)	18,3	18,3	19,4	19,5	19,7
Value of relative poverty threshold (single HH per year) - in PPS	2832	3372	3900	4536	4800
Severe Material Deprivation[3] (% of total population)	12,4	7,0	5,6	4,9	6,2
Share of people living in low work intensity households[4] (% of people aged 0-59 not student)	9,4	7,0	6,2	5,3	5,6
In-work at-risk-of poverty rate (% of persons employed)	7,5	7,8	7,9	7,4	8,3

Notes:

[1] People at-risk-of poverty or social exclusion (AROPE): individuals who are at-risk-of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in household with zero or very low work intensity (LWI).

[2] At-risk-of poverty rate: share of people with an equivalised disposable income below 60% of the national equivalised median income.

[3] Share of people who experience at least 4 out of 9 deprivations: people cannot afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish, or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour tv, or ix) have a telephone

[4] People living in households with very low work intensity: Share of people aged 0-59 living in households where the adults work less than 20% of their total work-time potential during the previous 12 months.

Sources:

For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

Table VIII. Product market performance and policy indicators

Performance indicators	2001-2005	2006	2007	2008	2009	2010
Labour productivity[1] total economy (annual growth in %)	**6.5**	**4.4**	**5.8**	**-4.4**	**-5.4**	**8.9**
Labour productivity[1] in manufacturing (annual growth in %)	**9.1**	**15.1**	**5.5**	**-6.6**	**-11.2**	**28.0**
Labour productivity[1] in electricity, gas, water (annual growth in %)	**6.8**	**4.8**	**42.9**	**-5.5**	**-4.3**	n.a.
Labour productivity[1] in the construction sector (annual growth in %)	**5.6**	**-4.4**	**-10.6**	**-4.2**	**0.2**	**21.7**
Patent intensity in manufacturing[2] (patents of the EPO divided by gross value added of the sector)	**0.7**	**0.9**	**0.3**	n.a.	n.a.	n.a.
Policy indicators	**2001-2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Enforcing contracts[3] (days)	n.a.	**425**	**425**	**425**	**425**	**425**
Time to start a business[3] (days)	n.a.	**35**	**7**	**7**	**7**	**7**
R&D expenditure (% of GDP)	**0.8**	**1.1**	**1.1**	**1.3**	**1.4**	n.a.
Tertiary educational attainment (% of 30-34 years old population)	**28.6**	**32.5**	**33.3**	**34.1**	**35.9**	n.a.
Total public expenditure on education (% of GDP)	**5.2**	**4.8**	**4.9**	**5.7**	n.a.	n.a.
	2003	**2005**	**2006**	**2008**	**2009**	**2010**
Product market regulation[4], Overall (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	**1.3**	n.a.	n.a.
Product market regulation[4], Retail (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	**1.8**	n.a.	n.a.
Product market regulation[4], Network Industries6 (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	**2.5***	n.a.	n.a.

Notes:

[1]Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.

[2]Patent data refer to applications designated to the European Patent Office (EPO). They are counted according to the year in which they were filed at the EPO. They are broken down according to the inventor's place of residence, using fractional counting if multiple inventors or IPC classes are provided to avoid double counting.

[3] The methodologies, including the assumptions, of this indicator is presented in detail at the website http://www.doingbusiness.org/methodology.

[4] The methodologies of the Product market regulation indicators are presented in detail at the website http://www.oecd.org/document/1/0,3746,en_2649_34323_2367297_1_1_1_1,00.html. The latest available product market regulation indicators refer to 2003 and 2008, except for Network Industries.

6 Aggregate ETCR.

*figure for 2007.

Source:

Commission services, World Bank Doing Business (for enforcing contracts and time to start a business) and OECD (for the product market regulation indicators).

Box 4. — *Labour market flexibility*

During recent years, the Estonian labour market reacted to the major economic slowdown through lay-offs, a reduction in the number of hours worked per employee and nominal wage cuts. The unemployment rate (15-64) increased from 4.8% in 2007 to a record 17.3% in 2010. Meanwhile, unemployment is decreasing relatively fast, reaching 13.8% in 2010Q4. The number of hours worked per employee decreased from 41 hours/week in 2008 to 38 hours/week in 2009, before reverting to 39 hours/week in 2010. Average hourly growth wage decreased by 2.9% in 2009 and declined further by 0.6% in 2010.

The labour market adjustment in Estonia reflects both the type of shocks suffered by the economy and the prevailing labour market institutions. The level of Employment Protection Legislation (EPL) is close to that of the US, UK, Canada, New Zealand, Australia and Ireland, explaining the large fluctuation in employment. On the one hand, there are not many restrictions on dismissals and so the unemployment rate increased quickly; on the other hand, the low level of EPL does not constrain labour demand and so employment rates can rise equally quickly. In parallel, the prevailing collective bargaining at company-level facilitated the downward adjustment in nominal wages and the cut in the number of hours worked per employee. Both changes contributed to preventing unemployment from increasing even further. The duration, the net replacement rates and the coverage of the unemployment benefit system are relatively low. Therefore, there are no major risks of unemployment traps and benefit dependency arising from the system. In fact, the activity rate has increased during the recession.

As the recovery gets stronger, it could be important to ensure that the labour market equilibrium moves towards a higher employment level. A lower tax wedge could potentially support labour demand. In particular, social security contributions in Estonia are among the highest in the OECD. Moving from labour taxation towards an alternative revenue source (consumption, property or environment-based taxation) may also facilitate the recovery. In addition, it is necessary to prevent the emergence of labour market mismatches, which in the past constrained labour supply and contributed to wage growth above productivity. Therefore, ALMPs will be important to address the bottlenecks related to the availability of transferrable skills. The latter allow individuals to better adapt to structural and technological changes. Greater regional labour mobility could also help address labour shortages. In 2013, the government is expected to enact legislation that increases the unemployment benefit generosity. Given the currently low benefit levels, the measure is likely to increase the attachment of the unemployed to the labour market, contributing thereby to a better allocation of labour resources. Nonetheless, an important challenges remains to ensure that policies to make work pay continue to support employment and help avoid benefit dependency.